



DOE's Loan Programs Office

Presentation to The Secretary of Energy Advisory Board March 2014



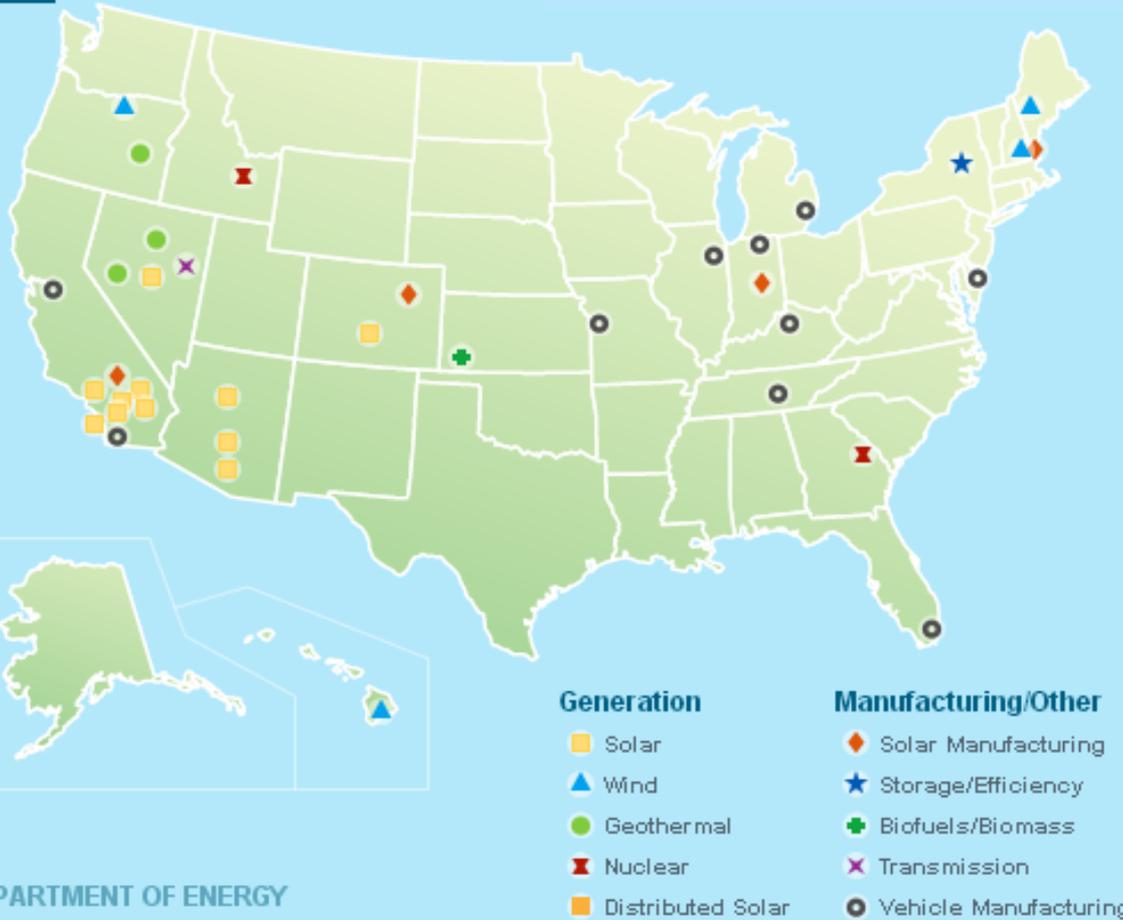
U.S. DEPARTMENT OF
ENERGY

LOAN PROGRAMS OFFICE

Loan Programs Office Has a Strong Portfolio of Projects

LOAN PROGRAMS OFFICE OUR PROJECTS

ALL 1703 1705 ATVM



DEPARTMENT OF ENERGY

Mission: Accelerate the U.S. commercial deployment of clean energy and advanced vehicle technology

Diverse Portfolio: Loan authority for fossil energy, renewable energy, nuclear, and advanced vehicles

**The current portfolio includes loans, loan guarantees, and commitments.*



U.S. DEPARTMENT OF

ENERGY

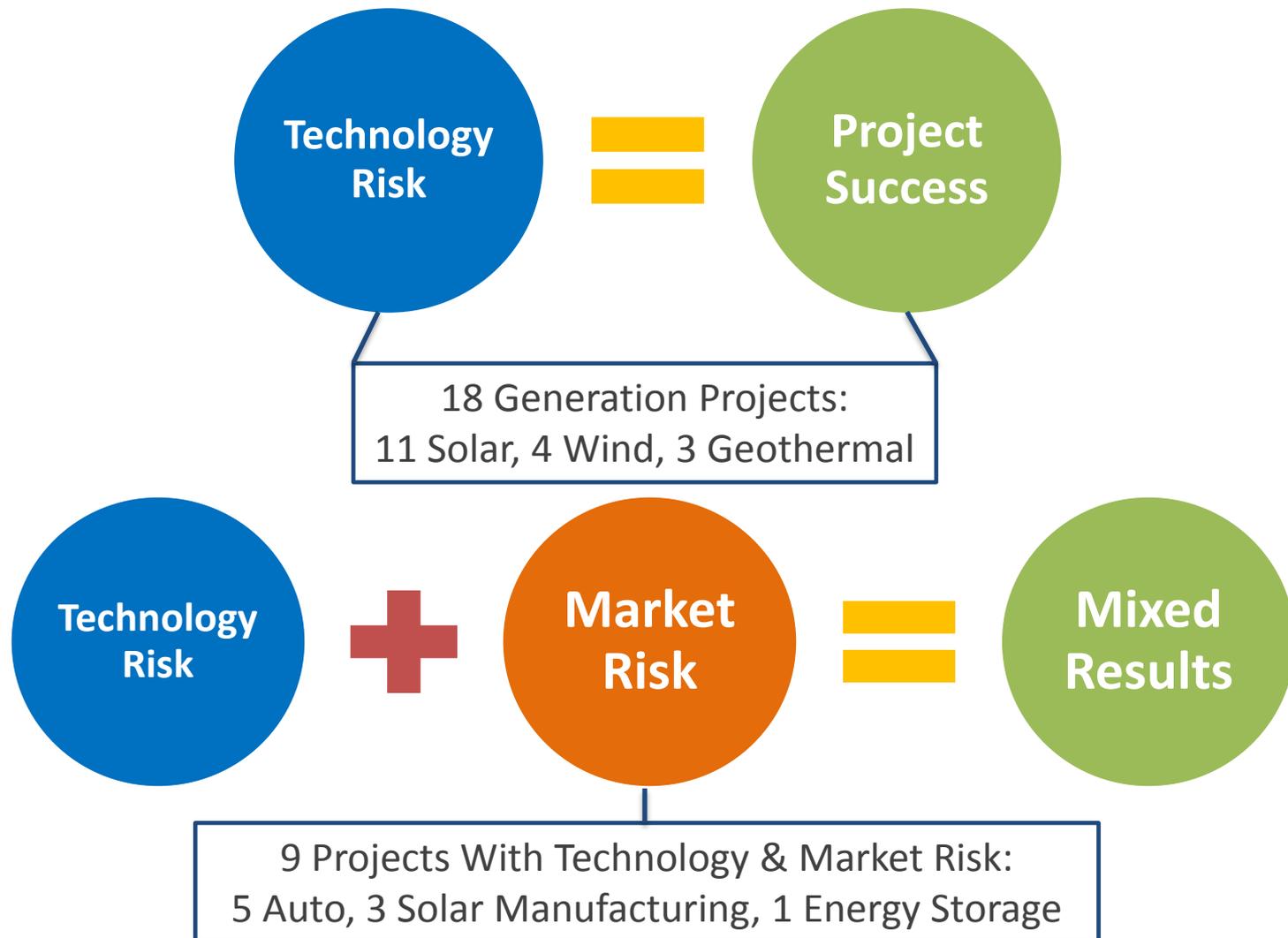
LOAN PROGRAMS OFFICE

The LPO Portfolio Has Strong Financial Performance

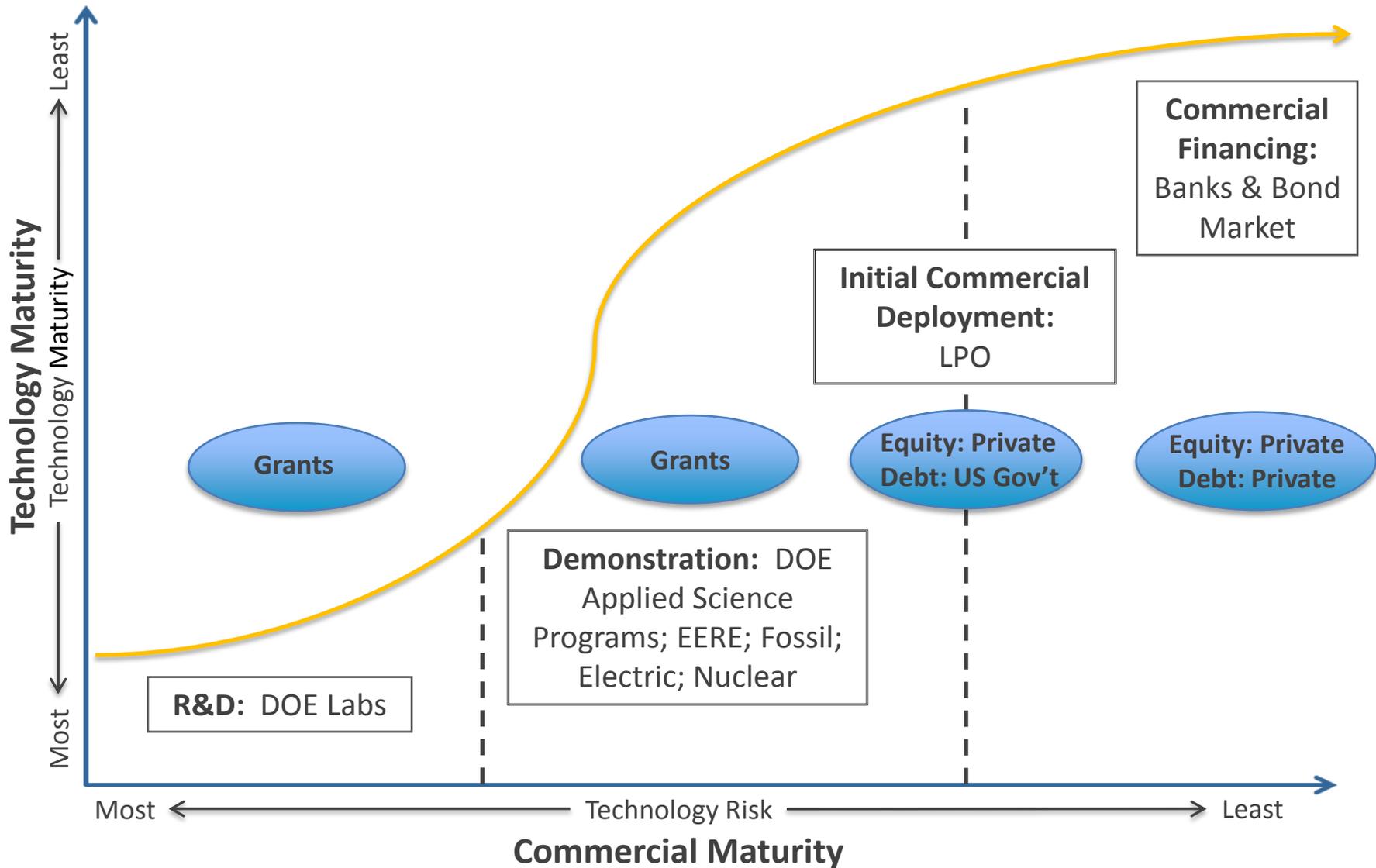
NUMBER OF PROJECTS	MORE THAN 30
TOTAL LOAN /LOAN GUARANTEE AMOUNT COMMITTED	MORE THAN \$32 BILLION
DISBURSED	\$21 BILLION
TOTAL LOAN LOSS RESERVE ESTABLISHED BY CONGRESS: <i>ATVM:</i> <i>1705:</i> <i>1703:</i>	\$7.0 BILLION \$2.9 BILLION SELF-PAY
LOSSES AS % OF TOTAL LOAN AMOUNT	APPROXIMATELY 2%
TOTAL ECONOMIC INVESTMENT LEVERAGED	MORE THAN \$50 BILLION
LPO PORTFOLIO CREDIT RATING <i>2014:</i> <i>2010:</i>	BB+ B



LPO's Record on Technology and Market Risk



DOE Programs Support the Full Arc of Commercialization



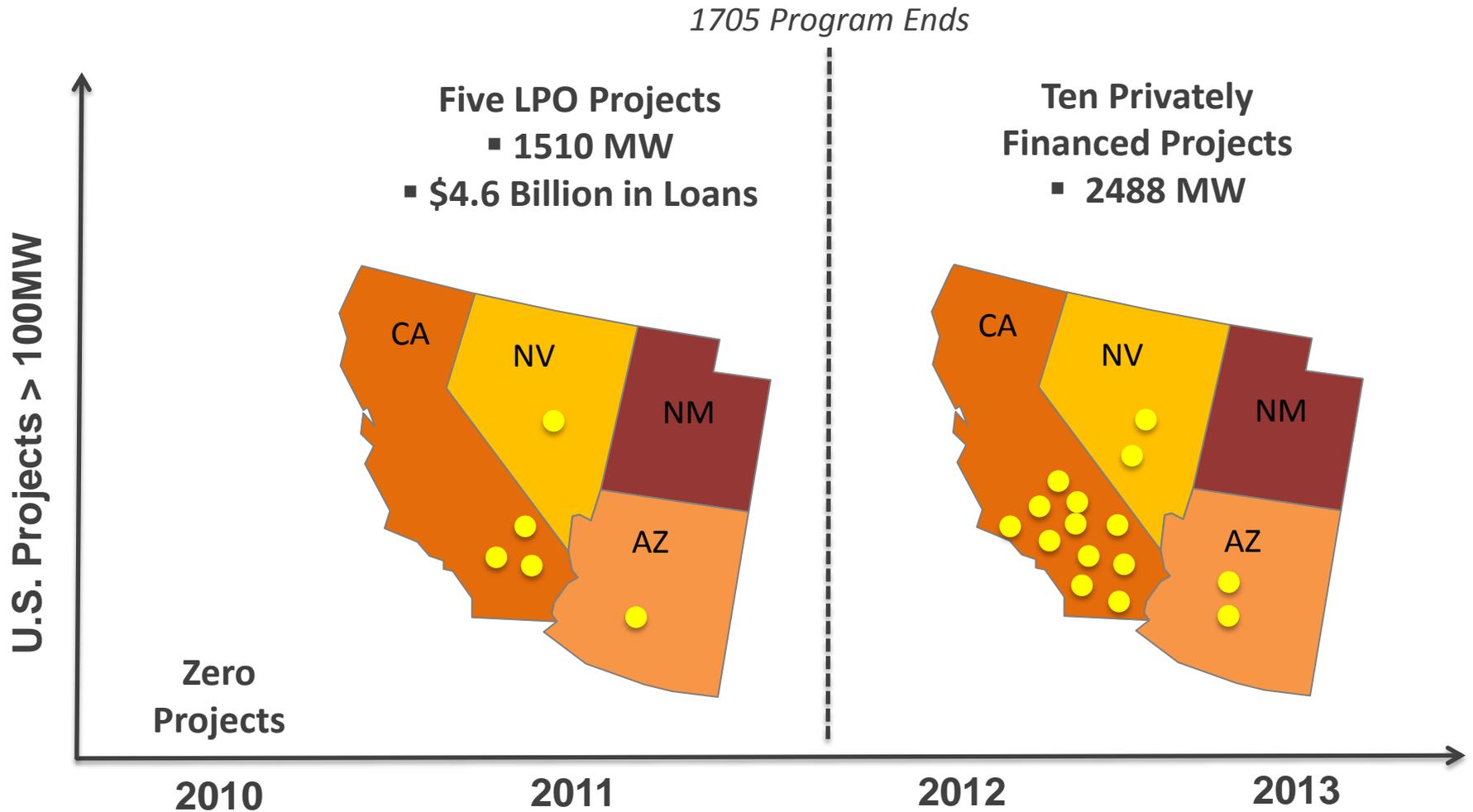
LPO Has Financed Deployment of Groundbreaking Projects

LPO is one of the largest project finance team in the world supporting a variety of all of the above projects:

- Several of the world's largest solar generation facilities and nighttime solar storage systems:
 - Photovoltaic generation: Agua Caliente, Desert Sunlight
 - Large concentrating solar power plants with innovative thermal energy storage: Solana, Solar Reserve Tonopah
 - Largest solar thermal plant: Ivanpah
- Retooled three electric vehicle manufacturing facilities: Tesla, Nissan & Ford
- One of the world's largest wind farms: Shepherds Flat
- One of the country's first commercial-scale cellulosic ethanol plants: Abengoa Biomass
- First nuclear power plant to begin construction in the US in the last 30 years: Vogtle

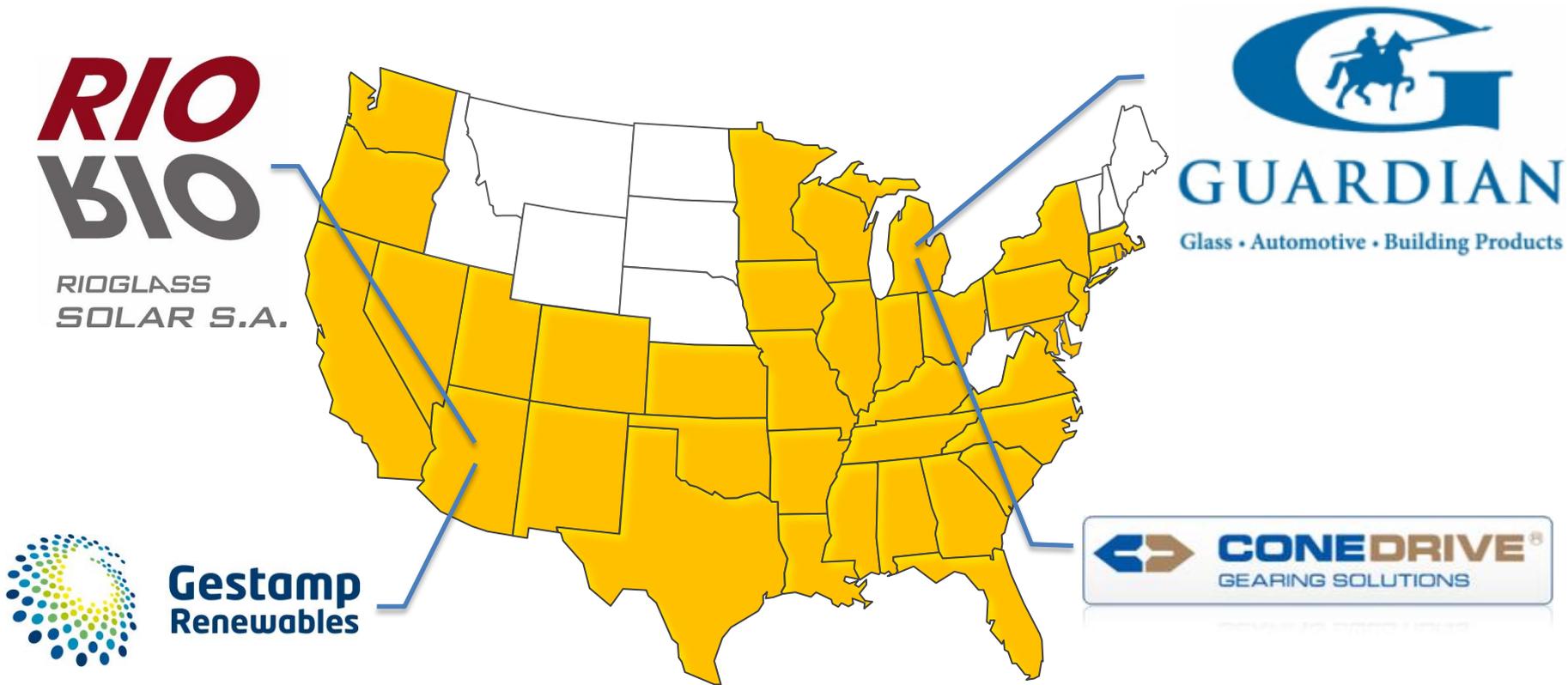


LPO Launched Utility-Scale Photovoltaic Market in the U.S.

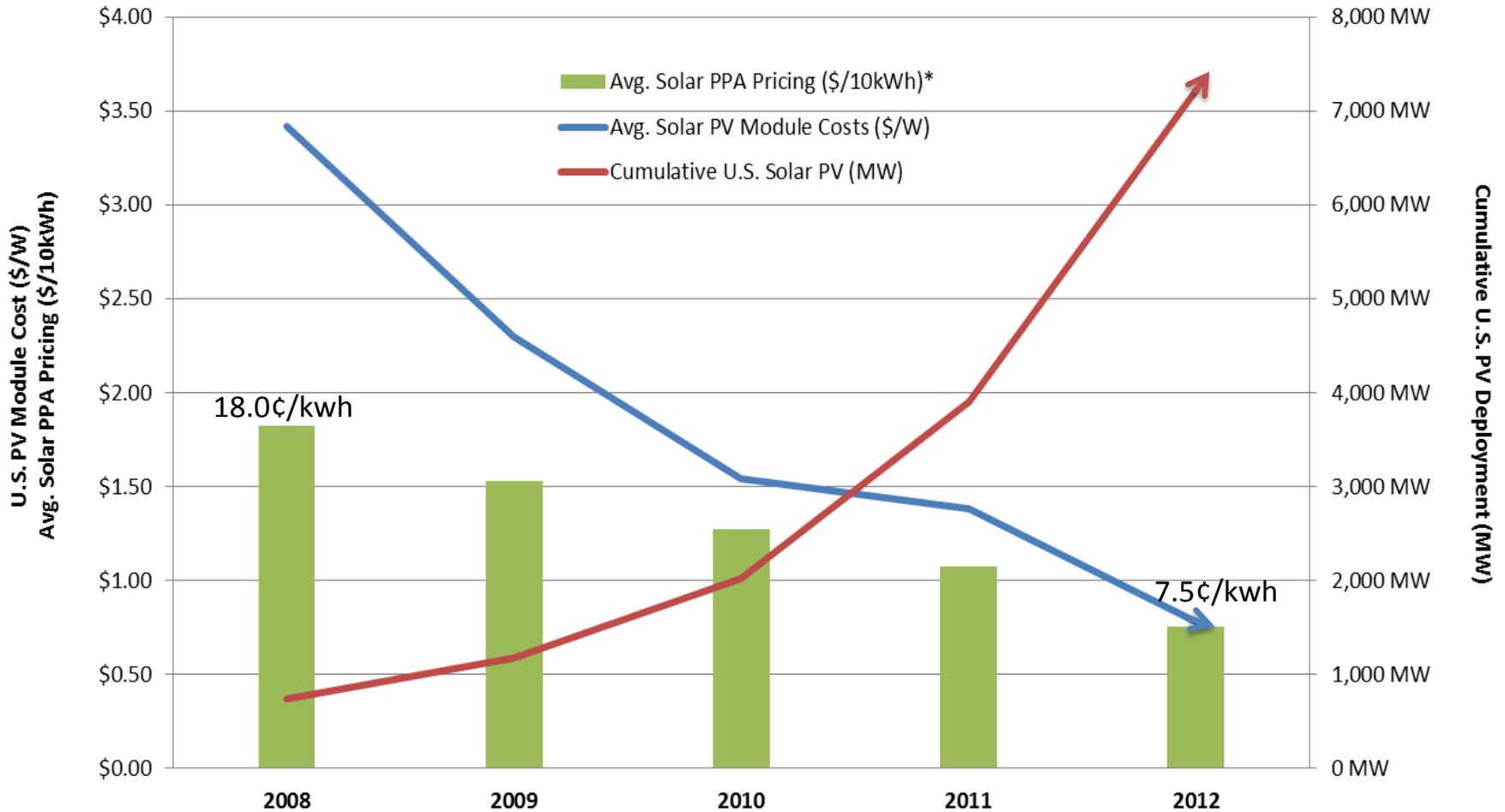


LPO Projects Supported a National Solar Energy Supply Chain

LPO provided financing for five Concentrating Solar Power (CSP) projects representing \$8 billion in total project investment. These projects supported a supply chain that created jobs and economic development in 39 states.



LPO Projects Have Helped Reduce the Cost of Solar Energy

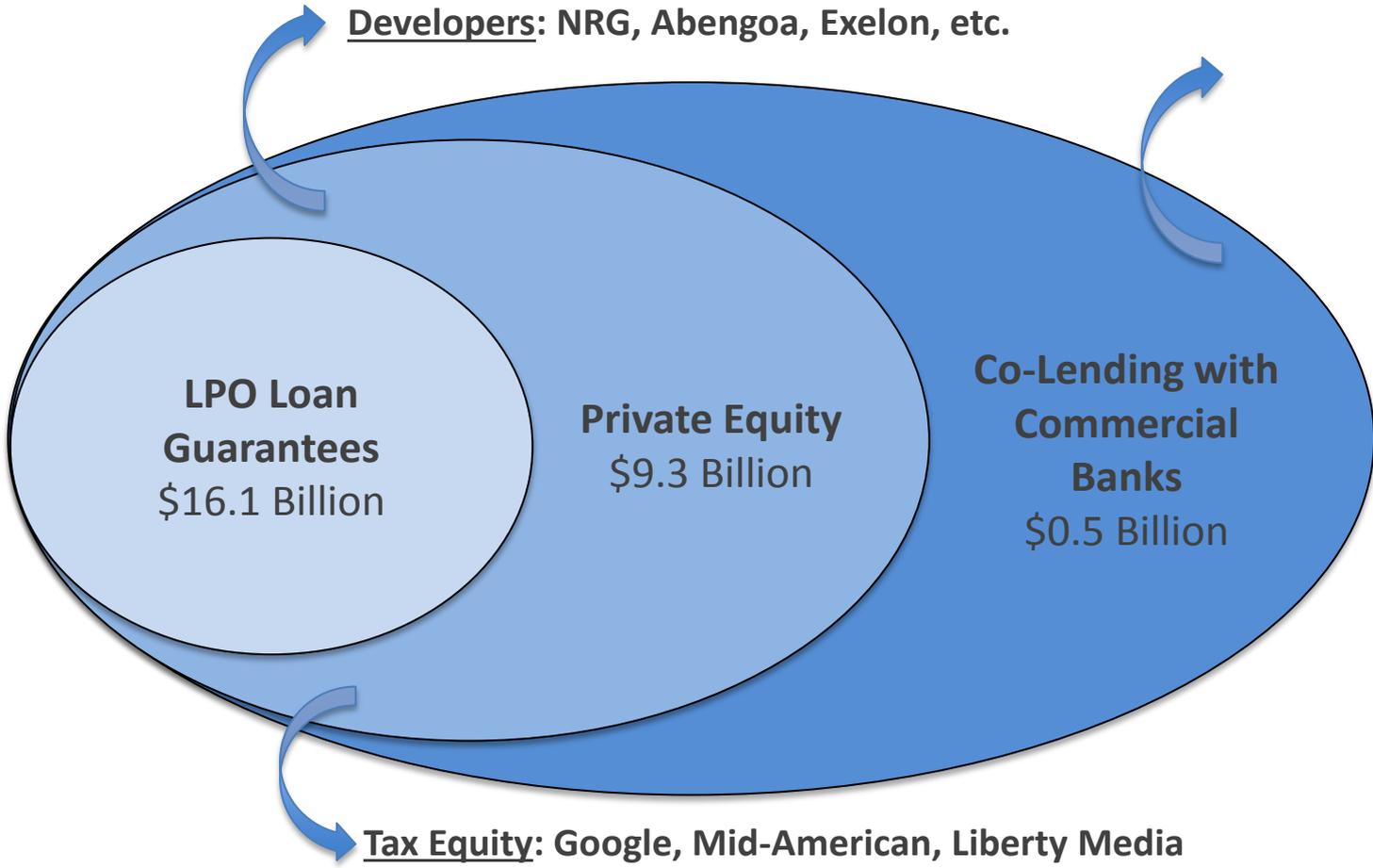


* PPA pricing data represents a levelized generation-weighted average of publicly available data for independent large-scale solar generators (PV & CSP).



LPO's Public-Private Partnerships Expanded Total Project Investment

\$26 Billion in Total Project Investment



Bank of America



BBVA



LPO Supported New Private Investments in Clean Energy



Major companies made their first clean energy investments in LPO projects:

- Google – First solar investment (Ivanpah)
- MidAmerican – One of first significant solar investments (Agua Caliente)



LPO projects attracted new tax equity investors:

- Liberty Media's \$300 million investment in Abengoa Solana – the first tax equity deal in U.S. government's energy portfolio.

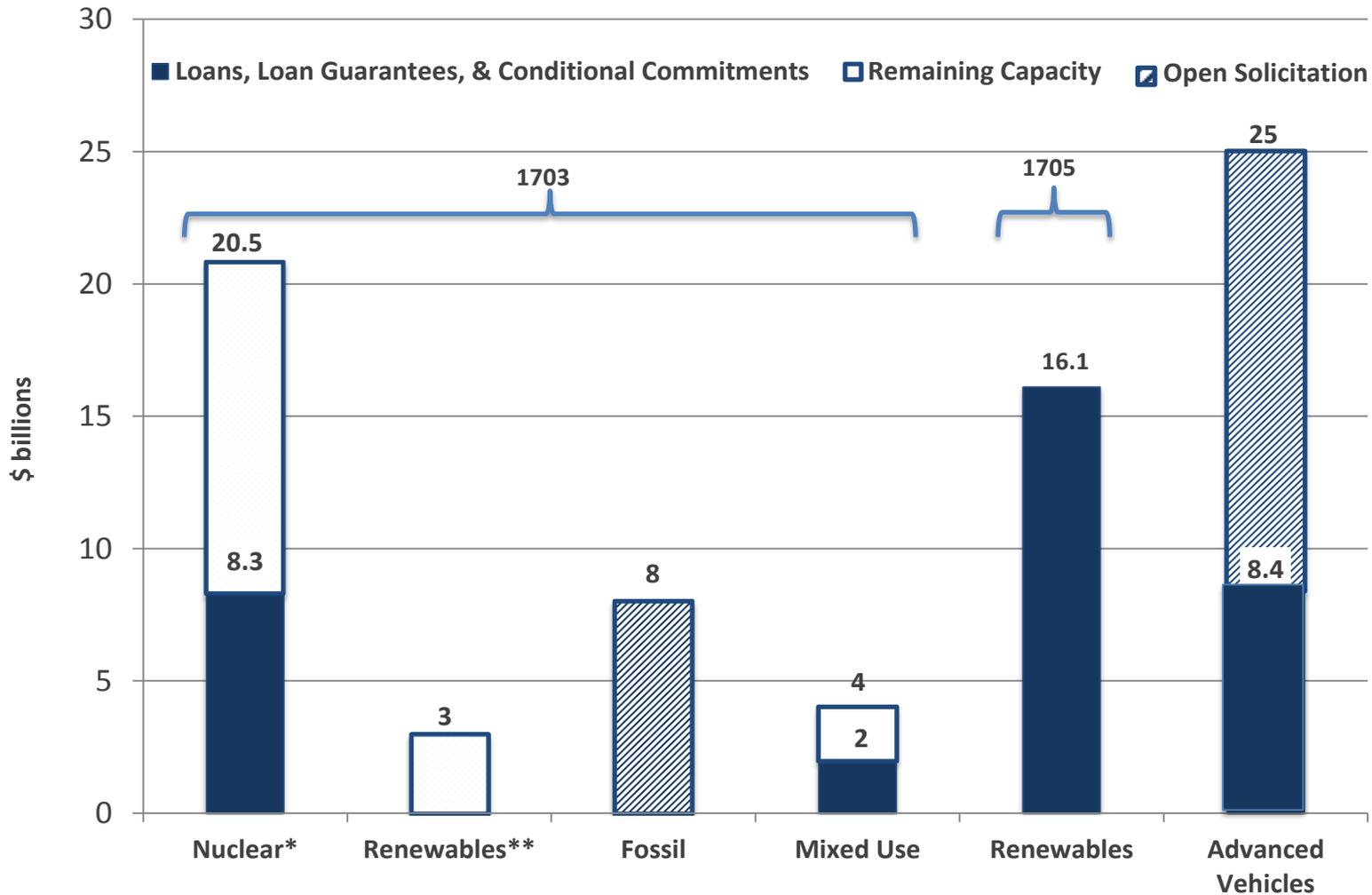


Promoted the development of "Yield Cos":

- Allowed a transfer of NRG's equity interest in California Valley Solar Ranch project from a stand-alone entity into NRG Yield Co.



LPO Has More than \$40 Billion in Remaining Loan Authority



*Includes nuclear generation and front-end nuclear projects.

**Imputed loan authority. Actual loan volume will depend on actual credit subsidy rates for projects.



Advanced Fossil Energy Projects Solicitation



\$8 Billion in Loan Guarantees Available

- Long-term debt financing available for eligible projects.
- Solicitation issued in December 2013.
- Rolling application deadlines through 2016.



What is an Advanced Fossil Energy Project?

- Projects must be innovative, utilize fossil energy.
- Reduce, avoid, or sequester greenhouse gas emissions.
- Located in U.S. with reasonable prospect of repayment.



Solicitation Highlights Four Technology Areas

- Advanced Resource Development (*i.e. novel oil and gas drilling*)
- Low Carbon Power Systems (*i.e. oxycombustion or chemical looping*)
- Carbon Capture (*i.e. CO₂ capture from electricity generation*)
- Efficiency Improvements (*i.e. CHP systems or microgrids*)



Advanced Technology Vehicles Manufacturing Loan Program



ATVM Supports U.S. Advanced Vehicle Manufacturing

- Program has issued over \$8 Billion in loans.
- \$16.6 billion in remaining loan authority.



ATVM Offers Attractive Financing for U.S. Auto Industry

- Vehicle and component manufacturing projects are eligible.
- Supports new facilities, retooling, and retrofits.
- Long-term financing at low interest rates with minimal fees.



ATVM Can Support U.S. Auto Industry Resurgence

- Aids compliance with rising fuel economy standards.
- Addresses industry capacity constraints.
- Supports insourcing of American manufacturing.



Utilizing Remaining Clean Energy Loan Guarantee Authority



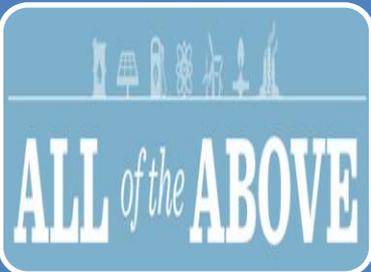
Renewable Energy & Energy Efficiency

- \$1.5 billion in loan guarantee authority and \$169 million in appropriated credit subsidy.
- LPO will target catalytic projects and key technology areas.



Nuclear Energy

- \$10.2 billion for nuclear generation and \$2 billion for front end projects.

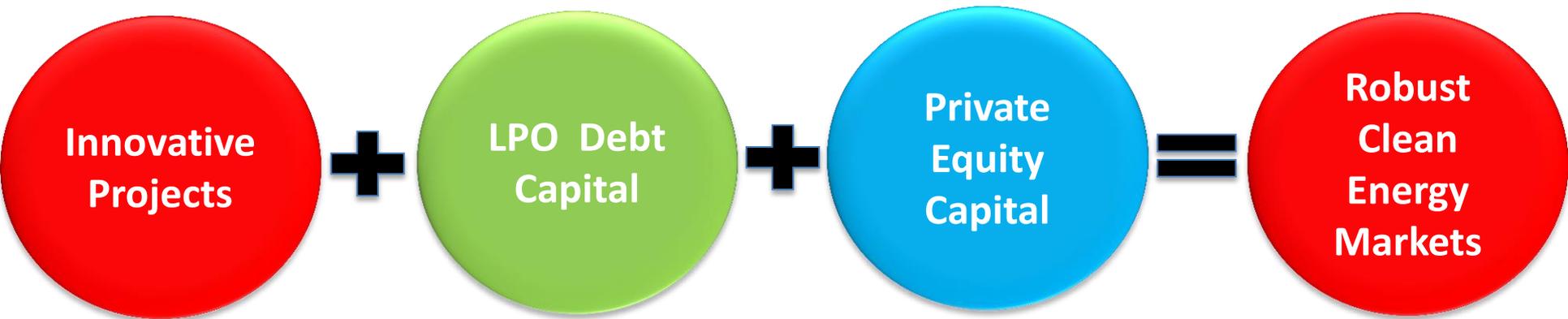


Mixed-Use Authority

- \$2 billion of remaining loan guarantee that can be used for any eligible technology under Title XVII.



LPO Can Continue to Accelerate U.S. Clean Energy Deployment



For further information on LPO, please visit: www.lpo.energy.gov

